

Serial No.: 09/557,423
Filed: April 22, 2000

preselected target nucleic acid sequence, a second homology clamp that is substantially complementary to said preselected target nucleic acid sequence, and at least one locking sequence.

833
C1
D2
C1
44. (Amended) The composition of claim 113 further comprising a secondary probe, wherein said probe is substantially complementary to at least one of forms a lock structure with said locking sequence.

45. (Amended) The composition of claim 113 wherein said locking sequences form an anchor structure from the group consisting of a triplex anchor, a quadruplex anchor, a Z-DNA anchor, and an A-DNA anchor.

C2
52. (Amended) The composition of claim 113 wherein at least one of said targeting polynucleotides comprises a peptide nucleic acid.

53. (Amended) The composition of claim 113 wherein said locking sequences comprise DNA and RNA.

54. (Amended) The composition of claim 113, wherein said recombinase is a species of prokaryotic recombinase.